

CLAIMS:

1. A process for preparing a transparent polyester / polycarbonate composition comprising:

reacting together at a first location in a molten state, at a temperature
5 between about 225 to about 350°C, a polycarbonate resin and a polyester resin,
and in the presence of an effective amount of a catalyst,

adding to the molten mixture at a location downstream from the first
location, an effective amount of an acidic stabilizing additive,

10 kneading said stabilizing additive and said molten stream for a
resulting copolymer blend having a single glass transition temperature.
2. The process of claim 1, wherein said catalyst is selected from the group
consisting of alkali metal and alkaline earth metal salts of aromatic
dicarboxylic acids, alkali metal and alkaline earth metal salts of aliphatic
dicarboxylic acids, Lewis acids, metal oxides, their coordination complexes
15 and mixtures thereof.
3. The process of claim 1, wherein said polyester is selected independently from
a group consisting of reacting an aromatic dicarboxylic ester or acid with an
aliphatic diol.
4. The process of claim 1, wherein said polycarbonate is an aromatic
20 polycarbonate.
5. The process of claim 1, wherein said transparent polyester / polycarbonate
composition is in a range of about 10 to about 90 percent by weight of
polyester and about 90 to about 10 percent by weight of polycarbonate.
6. The process of claim 1, wherein said acidic stabilizing additive is selected
25 from the group consisting of: phosphorus oxo acids, acid organo phosphates,

acid organo phosphites, diphosphites, esters of phosphoric acid, salts of phosphoric acids or mixtures thereof.

5 7. The process of claim 1, wherein said stabilizing additive is present at a level from about 0 to about 5 percent by weight based on the total weight of said composition.

10 8. The process of claim 1, wherein the said process is a two pass process wherein said reacting step as set forth in claim 1 produces a resulting reacted product, said resulting reacted product is solidified to complete a single pass and said resulting solidified product is subsequently processed according to a second pass to a molten state prior to the adding step as set forth in claim 1.

15 9. A process for preparing transparent polyester / aromatic polycarbonate composition, said process comprising:
 reacting together at a first location in a molten state at a temperature between about 225 to about 350°C, a polycarbonate resin and a polyester resin and in the presence of an effective amount of a catalyst,

adding to the molten mixture at a location downstream from the first location, an effective amount of an acidic stabilizing additive,

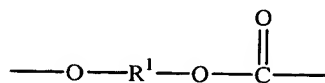
kneading said stabilizing additive and said molten stream for a resulting copolymer blend having a single glass transition temperature.

20 10. The process of claim 9, wherein said catalyst is selected from the group consisting of alkali metal and alkaline earth metal salts of aromatic dicarboxylic acids, alkali metal and alkaline earth metal salts of aliphatic dicarboxylic acids, Lewis acids, metal oxides, their coordination complexes and mixtures thereof.

25 11. The process of claim 9, wherein said catalyst is present in less than about 300 ppm.

12. The process of claim 9, wherein said polyester is a poly(ethylene terephthalate), a poly(1,4-butylene terephthalate), a cyclohexanedimethanol-terephthalic acid-ethylene glycol, a poly(cyclohexanedimethanol terephthalate), or a poly(alkylene naphthalate).
- 5 13. The process of claim 9, wherein the said process is a two pass process wherein said reacting step as set forth in claim 9 produces a resulting reacted product, said resulting reacted product is solidified to complete a single pass and said resulting solidified product is subsequently processed according to a second pass to a molten state prior to the adding step as set forth in claim 9.
- 10 14. The process of claim 9, wherein said polycarbonate comprises repeating units of the formula
- $$\text{---O---R}^1\text{---O---}\overset{\text{O}}{\parallel}\text{C---}$$
- wherein R¹ is a divalent aromatic radical derived from a dihydroxyaromatic compound of the formula HO-R¹-OH..
- 15 15. The process of claim 9, wherein said transparent polyester / polycarbonate composition is in a range of about 10 percent to about 90 percent by weight of polyester and 90 – 10 percent by weight of polycarbonate.
16. The process of claim 9, wherein said acidic stabilizing additive is selected from the group consisting of: phosphorus oxo acids, acid organo phosphates, acid organo phosphites, diphosphites, esters of phosphoric acid, salts of phosphoric acids arylphosphonic acid, arylacid phosphate metal salts, acidic phosphite metal salts or mixtures thereof.
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17. The process of claim 9, wherein said catalyst is present at a level from about 5 ppm to about 2000 ppm percent by weight based on the total weight of said composition.
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18. The process of claim 9, wherein said acid stabilizing additive is present at a level from about 0 to about 2 percent by weight based on the total weight of said composition.
19. An article comprising the composition of claim 9.
- 5 20. A process for preparing a transparent polyester / aromatic polycarbonate composition, said process comprising:
- melt mixing together at a first location in a molten state, at a temperature between about 225 to 350°C, a polycarbonate resin and a polyester resin, in presence of an effective amount of a catalyst,
- 10 adding at a location downstream from the first location, an effective amount of an acidic stabilizing additive,
- kneading said stabilizing additive and said molten stream for a resulting copolymer blend having a single glass transition temperature.
- 15 21. The process of claim 20, wherein said polyester is a poly(ethylene terephthalate), a poly(1,4-butylene terephthalate), a cyclohexanedimethanol-terephthalic acid-ethylene glycol, a poly(cyclohexanedimethanol terephthalate), or a poly(alkylene naphthalate).
22. The process of claim 20, wherein said polyester is a poly (ethylene -co-cyclohexylenedimethylene) terephthalate.
- 20 23. The process of claim 20, wherein said polycarbonate comprises repeating units of the formula



wherein R^1 is a divalent aromatic radical derived from a dihydroxyaromatic compound of the formula $\text{HO---R}^1\text{---OH}$.

24. The process of claim 25, wherein the dihydroxyaromatic compound from which R1 is derived is bisphenol A.
25. The process of claim 20, wherein said catalyst is selected from the group consisting of sodium stearate, zinc stearate, calcium stearate, magnesium stearate, sodium acetate, calcium acetate, zinc acetate, magnesium acetate, manganese acetate, lanthanum acetate, lanthanum acetylacetonate, sodium benzoate, sodium tetraphenyl borate, dibutyl tin oxide, antimony trioxide, sodium polystyrenesulfonate, PBT-ionomer, titanium isopropoxide and tetraammoniumhydrogensulfate and mixtures thereof.
26. The process of claim 20, wherein said catalyst is present in less than about 50 to 2000 ppm.
27. The process of claim 20, wherein said catalyst is present in less than about 50 to 1000 ppm.
28. The process of claim 20, wherein said catalyst is present in less than about 50 to 300 ppm.
29. The process of claim 20, wherein said transparent polyester / polycarbonate composition is in a range of about 10 – 90 percent by weight of polyester and 90 – 10 percent by weight of polycarbonate.
30. The process of claim 20, wherein said transparent polyester / polycarbonate composition is in a range of about 25 - 75 percent by weight of polyester and 75 – 25 percent by weight of polycarbonate.
31. The process of claim 20, wherein said transparent polyester / polycarbonate composition is in a range of about 25 percent by weight of polyester and 75 percent by weight of polycarbonate.
32. The process of claim 20, wherein said acidic stabilizing additive is selected from the group consisting of phosphorous compounds consisting of: phosphorus oxo acids, acid organo phosphates, acid organo phosphites,

diphosphites, esters of phosphoric acid, salts of phosphoric acids
arylphosphonic acid, arylacid phosphate metal salts, or mixtures thereof.

33. The process of claim 20, wherein said acidic stabilizing additive is phosphoric acid.
- 5 34. The process of claim 20, wherein said stabilizing additive is present at a level from about 0 to about 2 percent by weight based on the total weight of said composition.
35. The process of claim 20, wherein said stabilizing additive is present at a effective amount.
- 10 36. The process of claim 20, wherein the said process is a two pass process wherein said reacting step as set forth in claim 20 produces a resulting reacted product, said resulting reacted product is solidified to complete a single pass and said resulting solidified product is subsequently processed according to a second pass to a molten state prior to the adding step as set forth in claim 20.
- 15 37. The process of claim 20, wherein the amount of catalyst is in the range of about 20 ppm to about 50 ppm the said polyester / aromatic polycarbonate composition is ductile.
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38. The process of claim 20, wherein the amount of catalyst is in the range of greater than about 100 ppm the said polyester / aromatic polycarbonate composition is brittle.
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39. The process of claim 37 where in said catalyst is selected independently from the group consisting of sodium stearate, calcium acetate, zinc acetate, magnesium acetate and mixtures thereof.
- 25 40. The process of claim 38 where in said catalyst is sodium stearate, dibutyltin oxide, zinc stearate and mixtures thereof.

41. The polyester / aromatic polycarbonate composition of claim 30, wherein said composition has a yellowness index of about less than 20.
42. The polyester / aromatic polycarbonate composition of claim 30, wherein said composition transmits about greater than 70 percent light in the region of about 250nm to about 300nm.
43. The polyester / aromatic polycarbonate composition of claim 30, wherein said composition has a haze value about less than 30.
44. An article comprising the composition of claim 30.